CITY OF AUSTIN
PUBLIC WORKS DEPARTMENT

LONGHORN DAM MULTIMODAL IMPROVEMENTS

CONNECTING YOU ALL AROUND AUSTIN



November 13, 2018





AGENDA



- Introduction of project team, purpose, and timeline
- Project and planning history
- Existing conditions
- Preliminary engineering study of new bridge
- Interim solutions
- Project funding
- Feedback / Station breakout

PROJECT TEAM



City Project Sponsors: Janae Spence, Public Works Department

Nathan Wilkes, Austin Transportation Department

City Partners: D'Anne Williams, Parks and Recreation

Gareth Nicely, Austin Water Utility

Karl McArthur, Watershed Protection

Liz Johnston, Watershed Protection

City Project Manager: Genest Landry, Public Works Department

Project Consultants: Lee Frieberg, HDR

Jana McCann, McCann Adams Studio

Leilani Williams, Baer Engineering and Environmental

Public Information Officers: Elizabeth Ferrer, Public Works Department

Marissa Monroy, Austin Transportation Department

PROJECT PURPOSE



To **conduct a preliminary study** of a new pedestrian and bicycle bridge crossing Lady Bird Lake near Longhorn Dam and **evaluate potential interim improvements**.

PROJECT TIMELINE



BEGIN
PRELIMINARY
ENGINEERING
STUDY
(July 2018)

MEETING 1
IDENTIFY NEEDS
AND ISSUES
(We are here)

MEETING 2
PRESENT
ALTERNATIVES

(Spring 2019)

MEETING 3
PRESENT
PRECOMMENDATION

(Fall 2019)

BEGIN DETAILED ENGINEERING (TBD)

OPPORTUNITIES FOR INPUT

PROJECT HISTORY



Timeline Leading to this Study

- 2003-Current: Various city plans speak to the importance of improvements to the bridge
- 2014: Opening of the Boardwalk
- 2016-2018: Funding approved for Preliminary Engineering Study of new pedestrian bicycle bridge and interim improvements
- 2018: Consultant selected for Preliminary Engineering Study of new bridge
- Ongoing Feedback: Concerns raised by residents for bicycle and pedestrian safety

PROJECT HISTORY – What We've Heard



Existing bridge crossing is a barrier

Concern with low handrails

Concern with bicycles traveling in the roadway

Pleasant Valley separates the park

Concern with safety of crossing Pleasant Valley

Concern with width of sidewalk

Concern with speeds on Pleasant Valley

Not room to pass on sidewalk

What are your concerns?

What do you like?



Visit: Station 2 to share what needs improvement Station 3 to share what you like

PROJECT HISTORY – Existing Conditions

Physical Conditions

- Current sidewalks are 4' wide due to concrete barriers and not room for comfortable passing
- Sidewalks width and rail are not ADA compliant
- Western sidewalk serves Ann and Roy Butler Trail
- Dam maintenance results in trail closures
- Trail connections to north and south are difficult





PROJECT HISTORY – Connectivity

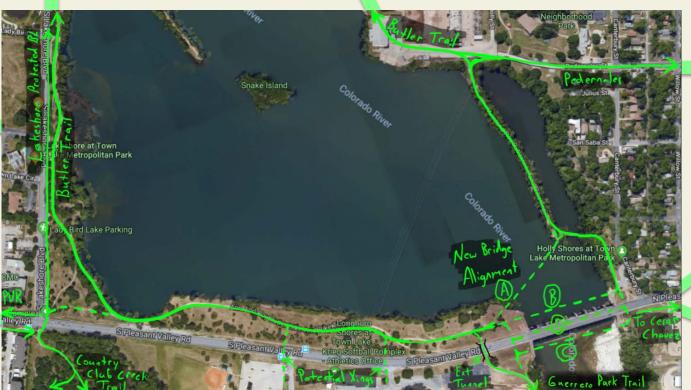
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Ann and Roy Butler Trail

Lakeshore & East Riverside

Pleasant Valley South



Eastlink Trail

Pleasant Valley North

PROJECT HISTORY – Planning History



Plans and Studies that Relate to this Priority Project

- 2009: Roy G Guerrero Colorado River Park Plan
- 2014: Bicycle Plan
- 2014: Urban Trails Plan
- 2014: Holly Shores / Edward Rendon Sr. Park at Festival Beach Plan
- 2014: Southeast Shore Plan
- 2014: Country Club Creek Trail Preliminary Engineering Report
- 2015 Present: EastLink Trail Plan
- * Visit the project website for more information on planning history of this project

PROJECT HISTORY – Planning History



Longhorn Dam Multi-modal Improvements: Existing Plans Affecting Project Area Connectivity



SOURCES:
Holly Shores/Edward Rendon, Sr. Park Master Plan: City of Austin, adopted 2014
Ann and Roy Butler Trail at the Southeast Shore Master Plan: City of Austin, adopted 2014
Aerial Imagery: City of Austin, 2017
Property Lines: Trais Compt Apprial District, 2016

100-Year Floodplain: City of Austin FloodPro, FEMA, 2018

BASE MAP SHOWING EXISTING, COUNCIL-ADOPTED MASTER PLANS

BRIDGE STUDY



About the Preliminary Engineering Study

- To study the feasibility, cost, and timeline of new pedestrian and bicycle bridge alignments
- Alternatives will be developed and analyzed based on a variety of design criteria
- The study will result in a recommended alternative
- The results of the study will be documented in a report to support the next phase of full engineering design
- Three public meetings will give a chance for input along the way

BRIDGE STUDY - ALIGNMENTS



Bridge Alignments Proposed to Study

The following alignments have been previously identified for study:

- A separate structure, upstream of the dam (Alignments A and B)
- A separate structure, downstream of the dam (Alignments C)
- Widening the existing bridge (Alignment D)



Visit Station 1 to suggest other alignments

that should be evaluated



BRIDGE STUDY - ALIGNMENTS



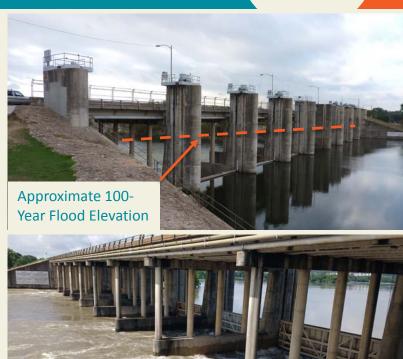
Flood Flow and Dam Maintenance May Affect Feasible Alignments

Colorado River

- 100-year flood elevation is 10' above normal surface elevation
- Floodplain Regulation No change in 100-year flood water surface elevation is allowed
- Concerns with proximity of potential bridge upstream for water flow and maintenance

Longhorn Dam Water Works

- Dam was built by Austin Energy for the Holly Power
 Plan and is now operated by Austin Water
- Dam maintenance needs water access and roadway access



Large water release

(planned, non-emergency)

BRIDGE STUDY – BRIDGE TYPES



Conventional Beam **Bridge Type**

(~\$6.7-\$8.0 Million)

Steel Truss **Bridge Type**

(~\$7.0-\$8.3 Million)

Conventional Beam Bridge Type with Enhanced Finishings (~\$7.1-\$8.4 Million)

Custom Beam Bridge Type

(~\$10.4- \$12.4 Million)

Iconic **Bridge Type**

(~\$21.7-\$26.2 Million)



Mopac Bicycle Bridge- Austin, TX



North Animas River Pedestrian Bridge- Aztec, NM



Pfluger Pedestrian Bridge- Austin, TX



Pfluger Pedestrian Bridge- Austin, TX



Sundial Bridge- Redding, CA





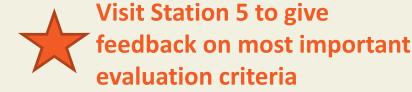
Visit station 4 to give your feedback on bridge type preference

BRIDGE STUDY – EVALUATION



Potential Evaluation Criteria

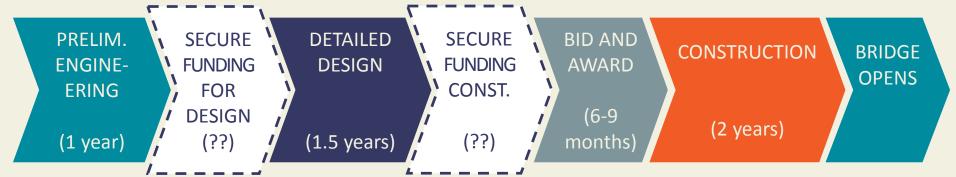
- Aesthetics
- Construction Cost
- Ease of Comfort of Crossing
- Environmental Impacts
- Neighborhood Compatibility
- Safety Features
- Street Connectivity
- Time to Implement
- Trail Connectivity
- Other?



BRIDGE STUDY –TIMELINE



Implementation Timeline to Opening



- Total Timeframe: 5 years 10+ Years
- Securing funding for design and construction is critical to accelerated timeline

INTERIM SOLUTIONS



We Want Your Feedback on Priority Interim Improvements

- Make pedestrian route over bridge ADA compliant
- Improve north and south pedestrian and bicycle connections connections to bridge
- Increase sidewalk widths on bridge
- Remove chain link fence from bridge
- Upgrade bridge handrails
- Reduce speeding on Pleasant Valley Road
- Improve pedestrian crossings of Pleasant Valley
 Road
- Others?



Visit Station 6 to give feedback potential interim improvements

BRIDGE STUDY - FUNDING



Current Funding

- \$950k of dedicated funding for this project
- \$500k has been earmarked for Preliminary Engineering Study
- Design and construction funds have not yet been secured
- Existing funding sources may be available to advance design of a bridge and / or interim improvements
- Funding for construction of a new bridge would need to be pursued

BREAKOUT STATIONS Please give us your feedback!



Station 1) Desired travel paths / alignments

Station 2) What needs improvement

Station 3) What do you like / Should be

preserved

Station 4) Bridge type preferences

Station 5) Evaluation Criteria

Station 6) Interim Improvements its Department

LONGHORN DAM MULTIMODAL IMPROVEMENTS PROJECT CONTACTS - Please give us your feedback!



Project Manager:

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